

IN THE CLAIMS

Cancel claims 3 and 13 without prejudice.

Please amend claims 1 and 11 to the following:

--1. (Amended) Demodulation structure for downconverting and demodulating a digitally modulated signal (S_0), comprising:
a local oscillator means (1, 5, 8) for providing a local oscillator signal (S_{lo}),
a mixer means (2) for mixing said local oscillator signal (S_{lo}) and said digitally modulated signal (S_0) in order to obtain a mixed signal,
a low pass filter means (3) for low pass filtering said mixed signal from said mixer means (2), and
an analog-to-digital converting means (4) for converting the filtered signal from said low pass filter means (3) into a downconverted and demodulated digital signal (S_1),
whereby said local oscillator signal is set in respect to said modulated digital signal so that said downconverted and demodulated digital signal (S_1) output from said analog-to-digital converting means comprises two serially arranged information parts, and
wherein said digitally modulated signal (S_0) is modulated in a signal band having a center frequency (f_c) and said local oscillator signal has a center frequency (f_{lo}), which is, in respect to said frequency (f_c) of the signal band, offset by half of the signal band width of the modulated digital signal (S_0).--

--11. (Amended) Method for downconverting and demodulating a digitally modulated signal (S_0), comprising the steps of:

providing a local oscillator signal (S_{lo}),
mixing said local oscillator signal (S_{lo}) and said digitally modulated signal (S_0) in
order to obtain a mixed signal,
low pass filtering said mixed signal, and
analog-to-digital converting the filtered signal into a downconverted and
demodulated digital signal (S_1),

whereby said local oscillator signal (S_{lo}) is set in respect to said modulated digital
signal (S_0) so that said downconverted and demodulated digital signal (S_1) comprises two serially
arranged information parts, and

wherein said digitally modulated signal (S_0) is modulated in a signal band having
a center frequency (f_c) and said local oscillator signal (S_{lo}) has a center frequency (f_{lo}) which is,
in respect to said center frequency (f_c) of the signal band, offset by half of the signal band width
of the modulated digital signal (S_0).--